UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JAN 25 2011

REPLY TO THE ATTENTION OF:
AE-17J

**CERTIFIED MAIL**
**RETURN RECEIPT REQUESTED**

John Cheong
Vice President of EPA Projects
Lafarge North America, Inc.
12725 Morris Road Extension
Suite 300
Alpharetta, GA 30004

Re: SCR Design Report for Joppa, IL Lafarge facility

Dear Mr. Cheong:

On October 27, 2010, Lafarge North America, Inc. (Lafarge) submitted a design report to the United States Environmental Protection Agency (U.S. EPA) and the Illinois Environmental Protection Agency (IEPA) to discuss the proposed Selective Catalytic Reduction (SCR) unit for Kiln 1 to be installed at the Lafarge Joppa, Illinois cement facility. Based upon the technical documentation provided by Lafarge subsequent to the issuance of the design report, both IEPA and U.S. EPA believe that the design report is approvable with the following conditions:

1. Lafarge must install and continuously operate a computer system to monitor the $NO_X$ concentrations at the continuous emission monitor, and utilize that data to vary the amount of reagent into the SCR to minimize ammonia slip and additional $NO_X$ generation (commonly called a "feed-back" or "feed-forward" system). Both U.S. EPA and IEPA are concerned that fluctuations in nitrogen oxide ($NO_X$) inlet concentrations may result in additional $NO_X$ or ammonia during kiln operation when these changes occur at the SCR. Both IEPA and U.S. EPA believe that a feed-forward or feed-back system is necessary to effectively operate this SCR system under the varying conditions found at a cement kiln.

2. Lafarge must continuously operate the existing water spray system (located at the kiln) that is currently being used to comply with MACT temperature limits. This current water system will stabilize temperature fluctuations for the SCR, ensuring that the reagent is always injected within the 570 to 660 degree Fahrenheit temperature window. If the water spray system causes any operational problems with the SCR, or other compliance problems, Lafarge will contact U.S. EPA and IEPA to discuss the adjustment to the operation.

3. Both IEPA and U.S. EPA emphasize the need to replace the SCR catalyst as needed to maintain effective operation, and maintain required $NO_X$ limitations. There will be no additional catalyst replacement requirements established at this time.

4. Nothing in this letter shall relieve Lafarge from the responsibility of complying with all other applicable requirements, including but not limited to, dioxin/furan limitations established in the MACT.

If you have any questions regarding these comments, please call me at (312) 353-5792.

Sincerely,

Kushal Som
Environmental Engineer
Air Enforcement and Compliance Assurance Section (IL/IN)

standard bcc's: official file copy w/ attachment(s)
originating organization reading file w/attachment(s)

other cc's: